

**U. S. PLANT PATENT APPLICATION OF**

**HELMUT UNGER**

**FOR: PENTAS PLANT NAMED**

**‘LAVA ROSE’**

UNGER, Helmut

TITLE: PENTAS PLANT NAMED 'LAVA ROSE'

APPLICANT: HELMUT UNGER

BOTANICAL CLASSIFICATION/CULTIVAR DESIGNATION:

*Pentas lanceolata* cultivar Lava Rose

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### BACKGROUND OF THE INVENTION

The present Invention relates to a new and distinct cultivar of Pentas plant, botanically known as *Pentas lanceolata*, and hereinafter referred to by the name 'Lava Rose'.

10       The new Pentas is a product of a planned breeding program conducted by the Inventor in Rheinfelden, Germany. The objective of the breeding program was to develop new moderately tall Pentas cultivars with numerous flowers and attractive flower and foliage coloration.

15       The new Pentas originated from a cross-pollination made by the Inventor during the summer of 1999 of two unidentified proprietary selections of *Pentas lanceolata*, not patented. The cultivar Lava Rose

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was discovered and selected by the Inventor as a flowering plant within the progeny of the stated cross-pollination in a controlled environment in Rheinfelden, Germany.

Asexual reproduction of the new cultivar by terminal cuttings  
5 taken in Rheinfelden, Germany, has shown that the unique features of this new Pentas are stable and reproduced true to type in successive generations of asexual reproduction.

#### SUMMARY OF THE INVENTION

The following traits have been repeatedly observed and are  
10 determined to be the unique characteristics of 'Lava Rose'. These characteristics in combination distinguish 'Lava Rose' as a new and distinct Pentas cultivar:

1. Upright and outwardly spreading plant habit.
2. Freely branching habit.
- 15 3. Dark green-colored leaves.
4. Freely flowering habit.

5. Dark pink-colored flowers arranged in large terminal corymbs that are positioned above the foliage.

Plants of the new Pentas differ primarily from plants of the parent selections in the following characteristics:

- 5           1. Plants of the new Pentas are more compact than plants of the parent selections.
2. Plants of the new Pentas have larger flowers and larger inflorescences than plants of the parent selections.
3. Flowers of plants of the new Pentas are not fragrant
- 10           whereas flowers of plants of the parent selections are fragrant.

The new Pentas can be compared to the *Pentas lanceolata* cultivar New Look Red, not patented. However, in side-by-side comparisons conducted in Rheinfelden, Germany, plants of the new

15 Pentas differed from plants of the cultivar New Look Red in the following characteristics:

1. Plants of the new Pentas were taller and more vigorous than plants of the cultivar New Look Red.
2. Plants of the new Pentas were more uniform than plants of the cultivar New Look Red.
- 5 3. Flowers of plants of the new Pentas were brighter in color than flowers of plants of the cultivar New Look Red.

The new Pentas can also be compared to the *Pentas lanceolata* cultivar New Look White, not patented. However, in side-by-side  
10 comparisons conducted in Rheinfelden, Germany, plants of the new Pentas differed from plants of the cultivar New Look White in the following characteristics:

1. Plants of the new Pentas were taller and more vigorous than plants of the cultivar New Look White.
- 15 2. Plants of the new Pentas had larger inflorescences than plants of the cultivar New Look White.

3. Plants of the new Pentas were more uniform than plants of the cultivar New Look White.

### BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new cultivar, showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photographs may differ slightly from the color values cited in the detailed botanical description which accurately describe the colors of the new Pentas. The photograph at the top of the sheet comprises a side perspective view of a flowering plant of 'Lava Rose' grown in a container. The photograph at the bottom of the sheet is close-up view of typical flowers, inflorescences and leaves of 'Lava Rose'.

### DETAILED BOTANICAL DESCRIPTION

Plants of the cultivar Lava Rose have not been observed under all possible environmental conditions. The phenotype may vary somewhat with variations in environment such as temperature and

light intensity, without, however, any variance in genotype. The  
aforementioned photographs and following observations and  
measurements describe plants grown in Lompoc, California, under  
commercial practice in a polycarbonate-covered greenhouse during  
5 the summer. During the production of the plants, day temperatures  
ranged from 21 to 27°C, night temperatures ranged from 16 to 18°C  
and light levels ranged from 5,000 to 9,000 foot-candles. Rooted  
young plants were pinched once and then planted in 15-cm containers.  
Plants had been growing for about 16 weeks when the photographs  
10 and the description were taken. In the following description, color  
references are made to the Royal Horticultural Society Colour Chart,  
1995 Edition, except where general terms of ordinary dictionary  
significance are used.

15 BOTANICAL CLASSIFICATION:

*Pentas lanceolata* cultivar Lava Rose.

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PARENTAGE:

Female, or seed, parent: Unidentified proprietary selection of *Pentas lanceolata*, not patented.

Male, or pollen, parent: Unidentified proprietary selection of  
5 *Pentas lanceolata*, not patented.

PROPAGATION:

Type cutting: Terminal cuttings.

Time to initiate roots: About 10 to 14 days at 22°C.

Time to produce a rooted young plant: About 28 days at 20°C.

10 Root description: Fine; white in color.

Rooting habit: Freely branching.

PLANT DESCRIPTION:

General appearance: Upright and outwardly spreading plant habit; inverted triangle.

15 Growth and branching habit: Moderately vigorous and freely-branching growth habit with about eleven lateral branches per



plant. Pinching, that is removal of the terminal apex, enhances branching potential.

Plant height: About 32 cm.

Plant diameter or spread: About 40 cm.

5 Lateral branches:

Length: About 24 cm.

Diameter: About 5 mm.

Internode length: About 5 to 6 cm.

Texture: Pubescent.

10 Color: 144A.

Foliage description:

Arrangement: Opposite, simple.

Length: About 9.8 cm.

Width: About 4.2 cm.

15 Shape: Narrowly elliptical.

Apex: Acute.

Base: Acute to attenuate.

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Margin: Entire.

Texture, upper and lower surfaces: Pubescent; coarse; rugose.

Venation pattern: Pinnate.

5 Color:

Developing foliage, upper surface: 137A.

Developing foliage, lower surface: 147B.

Fully expanded foliage, upper surface: 147A.

Fully expanded foliage, lower surface: 147B.

10 Venation, upper surface: 146C.

Venation, lower surface: 144B.

Petiole:

Length: About 4 to 5 mm.

Diameter: About 2 mm.

15 Texture, upper and lower surfaces: Pubescent.

Color: 144B.

FLOWER DESCRIPTION:

Flower type and habit: Numerous salverform single flowers that are arranged on large terminal corymbs; about 55 flowers develop per corymb. Flowers face upright and outward. Inflorescences  
5 positioned above the foliage on erect peduncles. Flowers last about 10 to 14 days under greenhouse conditions. Flowers not persistent. Flowers not fragrant.

Natural flowering season: In the garden, flowering is continuous through the spring and summer. In the greenhouse, flowering is  
10 continuous year-round.

Inflorescence height: About 5 cm.

Inflorescence diameter: About 7.5 by 9.5 cm.

Flower height: About 3 cm.

Flower diameter: About 1.8 cm.

15 Flower tube length: About 2.4 cm.

Flower throat diameter: About 4 mm.

Flower tube diameter: About 1 mm.

Flower buds (at stage of showing color):

Length: About 1.2 cm.

Diameter: About 2 mm.

Shape: Elongated ovoid.

5 Color: 63C.

Petals:

Quantity per flower/arrangement: Five to six in a single whorl; fused at base.

Lobe length: About 8 mm.

10 Lobe diameter: About 4 mm.

Lobe shape: Elliptic.

Lobe apex: Acute.

Lobe base: Fused.

Lobe margin: Entire.

15 Texture, upper and lower surfaces: Smooth, glabrous; velvety.

Color:

When opening and fully opened, upper surface:  
74D; color becoming closer to 62A with  
development.

5                      When opening and fully opened, lower surface:  
75A to 75B.

Throat: 157D.

Tube: 75A to 75B.

Sepals:

10                      Quantity per flower/arrangement: Five to six in a single  
whorl; fused at base.

Length: About 2.5 mm.

Width: About 1.5 mm.

Shape: Elliptic.

15                      Apex: Acute.

Base: Fused.

Margin: Entire.

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Texture, upper and lower surfaces: Smooth, glabrous.

Color, upper surface: 147A.

Color, lower surface: 147B.

Peduncles:

5           Length: About 1 to 2 cm.

Diameter: About 1.5 mm.

Angle: Upright to about 45° from vertical.

Strength: Strong.

Texture: Pubescent.

10           Color: 144A.

Pedicels:

Length: About 2.5 to 4 mm.

Diameter: Less than 1 mm.

Angle: Upright to about 45° from vertical.

15           Strength: Strong.

Texture: Pubescent.

Color: 144A.

Reproductive organs:

Stamens:

Quantity per flower: Six.

Anther size: About 1 mm by 3 mm.

5 Anther shape: Ovoid.

Anther color: 1D.

Pollen amount: Scarce.

Pollen color: 1D.

Pistils:

10 Quantity per flower: One.

Pistil length: About 3 mm.

Stigma shape: Two-parted.

Stigma color: 65B.

Style length: About 2.4 mm.

15 Style color: 145D.

Ovary color: 145C.

Seed/fruit: Seed and fruit production have not been observed.

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**DISEASE/PEST RESISTANCE:**

Plants of the new Pentas have not been observed to be resistant to pathogens and pests common to Pentas.